#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

## WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-002171 Address: 333 Burma Road **Date Inspected:** 18-Apr-2008

City: Oakland, CA 94607

OSM Arrival Time: 1400 **Project Name:** SAS Superstructure **OSM Departure Time:** 2230 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai China

**CWI Name:** Sun Wei/Chen Xi **CWI Present:** Yes No **Inspected CWI report:** Yes No N/A **Rod Oven in Use:** Yes No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component:** OBG

### **Summary of Items Observed:**

DP300-001 & DP302-001

This Quality Assurance (QA) inspector arrived at ZPMC for observation of the SAS super structure fabrication. This QA inspector observed ZPMC welding deck plates DP300-001 and DP302-001 at gantry-1 using the Gas Metal Arc Welding (GMAW) and Submerged Arc Welding (SAW) processes. This QA verified the amperages, voltage and travel speed of each of the 6 welding heads used for production under the requirements of WPS-B-T-2342-U1 (U Rib)-3. The Ambient temperature in the shop was recorded at 26°c with the steel temperature at 26°c. The Deck panels were welded in two passes for both processes GMAW process was used for the root pass and SAW process was used for filler and cover pass. It was noted that ZPMC had 2-CWI inspectors, Sun Wei during the day shift hours until 1900 hrs and Chen Xi was the night shift CWI that started at 1900 hours there were 4- ZPMC QC inspectors in bay 1 this date and ABF had 3 QC representatives present this shift for bay 1. By the end of this QA inspectors shift ZPMC had completed the welding for both deck panels. The welding stated above was performed within the requirements of the WPS which included welding parameters and pre-heat and interpass temperatures. This QA inspector also performed a QA visual review of deck panels DP324-002 and DP275-001. Multiple areas noted for discontinuities that included but not limited to, overlap, incomplete fusion and under fill. This QA inspector completed the documentation for the production panels and visual verifications which was distributed to proper personnel for review.

## **Summary of Conversations:**

No pertinent conversations noted today.

## **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or

# WELDING INSPECTION REPORT

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remedial efforts please contact Pat Lowry, (858) 344-2712, who represents the Office of Structural Materials for your project.

Inspected By:	Riley,Ken	Quality Assurance Inspector
Reviewed By:	Hager, Craig	QA Reviewer